```
4873566.pn. or 4897711.pn. or 5052009.pn. or 5089861.pn. or
BRS L4
             17
5748658.pn. or "5763888" 5812717.pn. or 5835514.pn. or 6081638.pn. or 6194789.pn. or
6205274.pn. or 6275513.pn. or 6521989.pn. or 6588949.pn.
                                                             USPAT
      2004/04/05 12:47
      L5
                    4 and window USPAT
                                               2004/04/05 13:31
BRS
             7
      0
                    5574814.pn. USPAT; US-PGPUB 2004/04/05 14:49
BRS
      L6
      0
BRS
      L7
             23
                    5574814.URPN.
                                        USPAT
                                                      2004/04/05 13:31
      L8
                                        USPAT; US-PGPUB 2004/04/05 14:51
BRS
             5
                    alles.in. and laser
             0
BRS L9
             282
                    (laser with package) and hermetic$8 and window$6 USPAT; US-
PGPUB
             2004/04/05 14:52
                                                                           0
BRS
      903
             VCSEL
                           USPAT
                                         2003/02/07 14:27
BRS
      210
             VCSEL not semiconductor
                                        USPAT
                                                      2002/09/14 17:19
      0
BRS
      130
             ((integrated adj1 circuit) with IC) and 385/$.ccls.
                                                             USPAT
      2002/09/14 17:21
                                         0
BRS
             5631988.pn. USPAT
                                         2003/02/07 14:31
      1
             (window or plate) and 385/92.ccls. USPAT
BRS
      317
                                                             2003/02/07 14:33
                                         2003/02/07 14:32
BRS
      630
             385/92.ccls.
                           USPAT
             ((window or plate) with (VCSEL or chip)) and 385/92.ccls. USPAT
BRS
      39
      2003/02/07 14:45
      25
             (((window or plate) with (VCSEL or chip)) and 385/92.ccls.) and
BRS
                                                                           0
(hermetic$9 or seal$6)
                           USPAT
                                         2003/02/07 14:36
             ((window or plate) with (VCSEL or chip$6)) and 385/92.ccls.
BRS
      39
      USPAT
                    2003/02/07 14:40
             ((window or plate or port) with (VCSEL or chip)) and 385/92.ccls.
BRS
      46
                    2003/02/07 20:13
      USPAT
             ((window or plate or port) with (VCSEL or chip)) and 385/92.ccls. and
BRS
((window or plate or port) with (conduct$6 or trace))
                                                      USPAT
                                                                    2003/02/07
20:08
BRS
             ((window or plate or port) with (VCSEL or chip)) and ((window or plate
      4116
or port) with (conduct$6 or trace)) USPAT
                                               2003/02/07 20:09
      907
BRS
             (((window or plate or port) with (VCSEL or chip)) and ((window or plate
or port) with (conduct$6 or trace))) and optic$6
                                               USPAT
                                                             2003/02/07 20:11
             ((((window or plate or port) with (VCSEL or chip)) and ((window or plate
or port) with (conduct$6 or trace))) and optic$6) and (hermet$9 or seal$3) USPAT
      2003/02/07 20:12
```

```
(((((window or plate or port) with (VCSEL or chip)) and ((window or
BRS
      41
plate or port) with (conduct$6 or trace))) and optic$6) and (hermet$9 or seal$3) ) and
             USPAT
                           2003/02/07 20:12
385/$.ccls.
             ((((((window or plate or port) with (VCSEL or chip)) and ((window or
BRS
      32
plate or port) with (conduct$6 or trace))) and optic$6) and (hermet$9 or seal$3) ) and
385/$.ccls.) not (((window or plate or port) with (VCSEL or chip)) and 385/92.ccls.)
      USPAT
                    2003/02/08 23:47
                                               2003/07/26 13:57
BRS
      15
             5574814.URPN.
                                 USPAT
      0
             5574814.URPN. and (window or sapphire) USPAT
BRS
      3
                                                                   2003/02/08
17:14
BRS
             VCSEL same (window near2 lens)
                                               USPAT
                                                             2003/02/08 17:37
      4
BRS
             VCSEL and (window near2 lens)
                                               USPAT
                                                             2003/02/08 18:05
      12
BRS
      8
             (VCSEL and (window near2 lens)) not (VCSEL same (window near2
lens)) USPAT
                    2003/02/08 17:38
                                               2003/02/08 17:54
BRS
      8
             5625189.URPN.
                                 USPAT
      0
BRS
      3
             6114700.URPN.
                                  USPAT
                                               2003/02/08 18:00
             VCSEL and (window with lens)
BRS
      39
                                               USPAT
                                                             2003/02/08 18:05
             VCSEL same (window with lens)
BRS
      14
                                               USPAT
                                                             2003/02/08 18:06
             (VCSEL same (window with lens)) not (VCSEL same (window near2
BRS
      10
lens)) not (VCSEL and (window near2 lens))
                                               USPAT
                                                             2003/10/24 17:37
BRS
      7
             6056448.URPN.
                                 USPAT
                                               2003/02/08 18:08
      0
BRS
      6
             6318909.URPN.
                                 USPAT
                                               2003/02/08 18:30
BRS
      6
             5821571.URPN.
                                  USPAT
                                               2003/02/08 18:51
      0
             ((VCSEL same (window with lens)) not (VCSEL same (window near2
BRS
lens)) not (VCSEL and (window near2 lens))) and (hermet$9 or seal$3)
      2003/02/08 19:29
             (((VCSEL same (window with lens)) not (VCSEL same (window near2
BRS
lens)) not (VCSEL and (window near 2 lens))) and (hermet $9 or seal $3)) and sapphire
      USPAT
                    2003/02/08 19:36
             (mold$6 or press$6) with sapphire with glass
BRS
      79
                                                            USPAT
      2003/02/08 22:34
      42
             quartz adj1 epoxy
                                 USPAT
                                               2003/02/08 23:01
BRS
      0
      12
BRS
             (quartz near1 quartz) with window
                                               USPAT
                                                             2003/02/08 23:02
```

BRS	219	(quartz near1 sapphire) with window U	USPAT	2003/02/08 23:02			
BRS	75 USPA	75 ((quartz near1 sapphire) with window) and (fiber with optic\$6) USPAT 2003/02/08 23:19 0					
BRS	0 2003/0	trace with window with metal\$9 with 02/08 23:21 0	external\$6	USPAT			
BRS	19		USPAT	2003/02/08 23:21			
BRS 23:48	1	5574814.pn. and (window with solder)	) USPA	Т 2003/02/08			
-	1	5574814.pn. and (window same solder	r) USPA	Т 2003/02/08			
BRS	1	0	i) USFA	1 2003/02/08			
23:53 BRS	212	•	6) USPA	T 2003/02/08			
	312	hermetic\$9 and (window with adhes\$6	o) USFA	1 2003/02/08			
23:55	4.4	(hammatiat) and (window with adhast	(6)) and (anti-	of with fibor			
BRS	(hermetic\$9 and (window with adhes\$6)) and (optic\$6 with fiber)						
מממ	USPAT 2003/02/08 23:55 0 18 5574814.URPN. USPAT 2003/07/26 16:49						
BRS	18	5574814.URPN. USPAT 2	2003/07/20 10	0:49			
סמם	0	5626200 mm and (window same troops	() TICDA'	T 2003/07/26			
BRS 16:27	1	5636298.pn. and (window same trac\$6	6) USPA	1 2003/07/20			
	2	VCCEL with homeston LICDAT	2002/0	07/26 15:48			
BRS	3 0	VCSEL with hermet\$9 USPAT	2003/0				
BRS	1	1	//26 15:49	0			
BRS	3	5939773.URPN. USPAT 2	2003/07/26 15	5:49			
BRS	30	(window with trac\$6) with solder\$6 \ 0	USPAT	2003/07/26 16:28			
BRS	10 2003/0	((window with trac\$6) with solder\$6) 7/26 16:28 0	and optic\$6	USPAT			
BRS	1	5574814.PN. and ("116" same "131")	USPA	T 2003/07/26			
17:29		0					
BRS	0	5574814.PN. and ("116" same "131" s	same "130")	USPAT			
	2003/0	7/26 16:52	•				
BRS	1	5574814.PN. and ("116" same "131")	and "130"	USPAT			
	2003/0	7/27 10:40 0					
BRS	1	"19527026" with DE USPAT 2	2003/07/27 10	):42			
	0						
BRS	1	"19527026" and optic\$6 USPAT	2003/0	07/27 11:09			
BRS	109 0	Haruhiko.in. and fujitsu USPAT	2003/0	07/27 11:12			
BRS 11:11	20	(Haruhiko.in. and fujitsu) and tabuchi	USPA	T 2003/07/27			
BRS	33 0	tabuchi.in. and fujitsu USPAT	2003/07/27 11	:24			

BRS	0	tabuchi.in. and	d "07134223"	USPAT	2003/07/27 1	1:25
	0					
BRS	0	tabuchi.in. and	d "7134223"	USPAT	2003/07/27 1	1:26
	0		4		0000/07/07/	
BRS	0	tabuchi.in. and	d "05279967"	USPAT	2003/07/27 1	1:25
DD 0	0	#0.5 <b>0.5</b> 0.0.65#	TIOD AM	2002/07/27 11		0
BRS	1	"05279967"	USPAT	2003/07/27 11		0
BRS	0	"7134223"	USPAT	2003/07/27 11		0
BRS	0	"07134223"	USPAT	2003/07/27 11	1:28	0
BRS	0	"07134223"	JPO 2003/0			0
BRS	0	"7134223"		07/27 11:30		0
BRS	1	"05279967"		7/27 11:30		0
BRS	1	"05279967"	DERWENT	2003/07/27 11	1:30	0
BRS	0	"7134223"	DERWENT	2003/07/27 11	1:30	0
BRS	0	"07134223"	DERWENT	2003/07/27 11	1:31	0
BRS	132	\$6"134223"	<b>DERWENT</b>	2003/07/27 11	1:31	0
BRS	7	\$6"134223" a			2003/07/27 1	1:35
	0		•			
BRS	0	tabuchi and 23	3-05-95 USPA	T: JPO: DERW	VENT 2003/0	07/27 11:36
		0		-,,		
BRS	0	haruhiko and	23-05-95	USPAT: IPO:	DERWENT	2003/07/27
11:36	Ū	0	20 00 00	001111,010,	, DEICH EIN	2003/0//2/
BRS	0	tabuchi and 10	0-11-93 USPA	T. IPO. DERW	JENIT 2003/0	07/27 11:36
DIG	U	0	0-11-23 OSI 11	1, 31 O, DER W	7E111 2005/	51121 11.50
BRS	0	haruhiko and	10-11-93	USPAT: IPO:	DERWENT	2003/07/27
11:36	Ü	0	10 11 75	001111,010,	DERWERT	2003/07/27
	0	haruhiko and	"10-11-93"	LISPAT: IPO:	DERWENT	2003/07/27
11:37	U	0	10-11-25	05171, 31 0,	DERWENT	2003/07/27
BRS	78	J	h tabuchi) and	semiconductor	IICDAT: IDO	· DEDWENT
DIG		)7/27 11:40	ii taouciii) and s	0	051 A1, 31 O	, DERWENT
BRS	0		th tabuchi) and		and coth	USPAT; JPO;
		* *	iii tabuciii) aiiu 1:40		) and gozo	USFA1, JFU,
					and a02h	LICDAT, IDO.
BRS		• •	•		and gozb	USPAT; JPO;
	/ENT	2003/07/27 11		0	T IDO DEDI	
BRS	0	•	h tabuchi) and		T; JPO; DERV	VENT
		07/27 11:41		0		
BRS	0	•	h tabuchi) and	g02b USPA	T; JPO; DERV	VENT
		07/27 11:41		0		
BRS	17	(tabuchi) and	g02b USPA	T; JPO; DERW	VENT 2003/0	07/27 11:57
		0				
BRS	2	"19527026"	USPAT; JPO;	DERWENT	2003/07/27 12	2:00
	0					
BRS	1	•	USPAT	2003/07/27 20	0:52	0
BRS	202	Sasaoka.in.	USPAT	2003/07/27 20	0:53	0
BRS	54	Sasaoka.in. ar	nd sumitomo	USPAT	2003/07/27 20	0:53
	0					

BRS 0	(Sasaoka.in. and sumitomo) and hidemoto USPAT 2003/07/27
20:54	0
BRS 0	(Sasaoka.in. and sumitomo) and \$6"335648" USPAT 2003/07/27
20:55	0
BRS 21	(Sasaoka.in. and sumitomo) and "1550" USPAT 2003/07/28
07:04	0
BRS 1	6181858.pn. USPAT 2003/07/28 07:23 0
BRS 1	6181858.pn. and (single with mode) USPAT 2003/07/28 08:50
DD0 4	0
BRS 3	10-246830 USPAT; JPO; DERWENT 2003/07/28 08:51
0 DDC (1	(MCGEL come (window with lone)) not (MCGEL come (window noor)
BRS 61	(VCSEL same (window with lens)) not (VCSEL same (window near2 (VCSEL and (window near2 lens)) USPAT; US-PGPUB 2003/10/24
,,	(VCSEL and (window near2 lens)) USPAT; US-PGPUB 2003/10/24
17:31	(VCSEL same (window with lens)) not (VCSEL same (window near2
BRS 11	
iens)) not	(VCSEL and (window near2 lens)) USPAT 2003/10/24 17:31
BRS 11	(VCSEL same (window with lens)) not (VCSEL same (window near2
-	(VCSEL and (window near2 lens)) USPAT 2003/10/24 17:32
ichs)) not	
BRS 11	(VCSEL same (window with lens)) not (VCSEL same (window near2
	(VCSEL and (window near2 lens)) USPAT 2003/10/24 17:33
10110)) 1101	0
BRS 13	(VCSEL same (window with lens)) not (VCSEL same (window near2
lens)) U	SPAT 2003/10/24 17:37 0
BRS 20	(VCSEL same (window with lens)) USPAT 2003/10/24 18:15
	0
BRS 16	4873566.pn. or 4897711.pn. or 5052009.pn. or 5089861.pn. or
	on. or "5763888" 5812717.pn. or 5835514.pn. or 6081638.pn. or 6194789.pn. or
	on. or 6275513.pn. or 6521989.pn. or 6588949.pn.USPAT 2004/04/05
12:47	0
BRS 14	
	on. or 5763888.pn. or 5812717.pn. or 5835514.pn. or 6081638.pn. or
	on. or 6205274.pn. or 6275513.pn. or 6521989.pn. or 6588949.pn.
	SPAT 2003/12/03 21:25 0
BRS 18	, , , , , , , , , , , , , , , , , , , ,
	03/12/03 21:26
BRS 51	(bump with bond\$6) with (sapph\$8 or window\$4) USPAT
	03/12/04 11:47
BRS 1	6603209.pn. and (solder\$6 near2 bump\$4) USPAT 2003/12/04
09:30	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
BRS 3	(bump with bond\$6) with (sapph\$8 or window\$4) and 385/\$.ccls.
	SPAT 2003/12/04 11:09 0
BRS 12	((bump with bond\$6) with (sapph\$8 or window\$4)) and housing
U	SPAT 2003/12/04 13:38 0

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257/\$6.ccls. and window and (photonic or optoelectronic or "opto-BRS 502 electronic") 2003/12/04 15:32 **USPAT** 257/\$6.ccls. and window and (photonic or optoelectronic or "opto-**BRS** 36 electronic") and 385/\$.ccls. USPAT 2003/12/04 13:41 257/\$6.ccls. and window and (photonic or optoelectronic or "opto-BRS 20 2003/12/04 15:06 electronic") and (window near2 lens\$3) USPAT 0 **BRS** 35 257/\$6.ccls. and window and (photonic or optoelectronic or "optoelectronic")and VCSEL **USPAT** 2003/12/04 15:32 0 53 257/\$6.ccls. and window and (photonic or optoelectronic or "opto-USPAT; US-PGPUB 2003/12/04 15:32 electronic")and VCSEL 0 BRS 4 mooney.xa. and 310/\$.ccls. USPAT; JPO; DERWENT 2004/03/31 15:52